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United States Patent [19]

Yano et al.

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[54] **SPREAD SPECTRUM COMMUNICATION SYSTEM AND TRANSMISSION POWER CONTROL METHOD THEREFOR**

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[51] **Int. Cl.⁶** **H04B 7/216**

[52] **U.S. Cl.** **370/18; 375/205; 455/69**

[58] **Field of Search** 370/18, 21, 79;
455/38.1, 52.1, 52.2, 52.3, 54.1, 68, 69,
88, 116; 375/200, 205, 206, 208

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[57] **ABSTRACT**

In a spread spectrum communication system, one (W_n) of a series of orthogonal codes for spectrum spreading is assigned to signal-to-noise ratio measurement in a terminal. On the basis of a noise signal detected by de-spreading a signal received from an antenna with the above described orthogonal code W_n and a pilot signal, each terminal derives a signal-to-noise ratio. Each terminal transmits the signal-to-noise ratio to the base station as a power control signal. On the basis of signal-to-noise information received from each terminal as the power control signal, the base station controls signal transmission power for each terminal.

26 Claims, 12 Drawing Sheets

